ATTACHMENT

May 8, 2003

Dear Interested Party:

Subjec: Recovery Plan Assessment Process

The Fish and Wildlife Service (Service) is initiating a two step process to revise the 1994 Desert Tortoise Recovery Plan (DTRP). Step 1 will involve the review and assessment of new research and information gathered on many aspects of desert tortoise ecology, threats, conservation biology, monitoring and recovery actions. Step 2 will involve the revision of the recovery plan by a newly established recovery team of scientists, agency resource specialists, and stakeholders. Following is a description of the Step 1 of the process.

The Service has impaneled a committee of scientists to review and assess the DTRP. Members of the Assessment Committee include:

* **Dr. C. Richard Tracy (Committee Chair)** -- Professor of Biology and Director Biological Resources Research Center, University of Nevada, Reno
* **Roy Averill-Murray**-Amphibians and Reptiles Program Manager, Arizona Game and Fish Department.
* **Dr. David Delehanty**-Assistant Professor, Biological Sciences, Idaho State University.
* **Dr. Jill Heaton**- Assistant Professor, Environmental Studies, University of Redlands.
* **Dr. Jeff Lovich** -Director, Western Ecological Research Center, U.S. Geological Survey.
* **Dr. Earl McCoy** --Professor of Biology, University of South Florida
* **Dr. David J. Morafka**, Lyle E. Gibson Emeritus Professor of Biology, California State University, Dominguez Hills,
* **Ken Nussear,** Ph. D. Candidate, Ecology, Evolution, and Conservation Biology Program, University of Nevada, Reno

Additional information about the Assessment Committee is attached.

The charge of the Committee is to review the entire DTRP in relation to contemporary knowledge and, based on that review, prepare recommendations about which parts of the recovery plan need updating. The Committee will assemble and review all new literature pertinent to the recovery plan. In addition, the Committee will hold a number of meetings to conduct an in-depth review of selected topics (disease, monitoring, etc.). A tentative schedule of Committee meetings, including focal topics for each meeting is shown in Table 1 (attached). The Committee will complete a draft of their review and recommendations by November 2003; a final product will be delivered to the Service in January 2004.

The following process has been established to allow the Assessment Committee to complete its work in a timely and efficient manner and allow agencies and stakeholders the opportunity to participate appropriately in the process.

1. The Committee will hold a series of meetings (Table 1) to conduct in-depth review of selected topics relevant to the DTRP. As needed, the Committee will identify experts (scientists) to synthesize new information and brief the committee on the selected topic and/or provide alternative perspectives to the Committee. Federal, State, and local governments and interested stakeholders are invited to nominate or provide additional experts to brief the Committee with data and scientific information relevant to the topic of the meeting. **Nominations of scientists should be sent to me by May 15, 2003, or as soon as possible**. The nomination should include the name and qualifications of the scientists and a summary of the information that will be presented to the Committee.

2. Federal, State, and local governments, and interested stakeholders are also invited to nominate an observer to attend the Assessment Committee meetings. For the sake of having an efficient review process, observers will not be allowed to participate in the discussions or ask questions during the meeting. However, there will be time allotted at the end of each meeting for observers to provide comments or ask questions. The Service may need to limit the number of observers depending on the number of nominees. Consequently, interested parties are encouraged to coordinate/consolidate their nominations as feasible. **Nominations of observers should be sent to me by May 15, 2003, or as soon as possible**. The Service will review the nominations and decide who to invite.

3. A summary of all Committee meetings will be posted a University of Nevada, Reno website (in development) within two weeks following the meeting. In addition, material to be evaluated by the committee will also be posted on the website once it is developed.

4. The Committee Chair and Service will provide briefings/updates on the Recovery Plan assessment at meetings of the DMG and MOG.

   · June 11-12, 2003 DMG meeting: the mission and scope of the Assessment, proposed meeting schedule and agency/stakeholder involvement process.

   · October 7-8, 2003 DMG meeting in Death Valley: preliminary findings and issues.

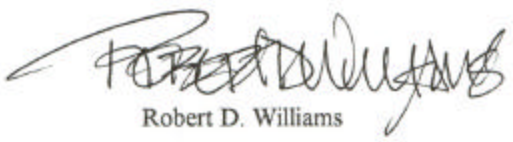
   · December 2003: detailed briefing to a joint meeting of the MOG and DMG somewhere in California to present findings and recommendations. This meeting will occur after the Committee issues its draft report.

   · Others to be announced.

5. A draft report will be issued in December 2003 and sent out for review and comment by interested parties.

If you have questions or concerns about the Desert Tortoise Recovery Plan assessment, please contact me at 775-861-6300.

Sincerely,



Bob Williams
Nevada Field Supervisor

cc Assessment Committee, Chair

Table 1. Tentative meeting schedule of the Desert Tortoise Recovery Plan Assessment Committee

Date/Location	Meeting/Theme	Invited scientists
April 11, San Francisco	Introduction and Mission	Team members
May 15-16, Palm Springs	Distinct Population/Threats	Dr. Boarman
June 9-10, San Francisco	Threats Disease/Adequateness Original Plan	Drs. M. Brown, D. Brown and D. Rostel
July 30-31, Tucson, Az	Demographic status and habitat	Dr. K. Berry
Others to be announced:	Monitoring, etc.	

Attachment
Desert Tortoise Recovery Plan Assessment Committee

The Assessment Committee includes members with substantial expertise in (a) desert tortoise biology/ecology, (b) turtle biology more generally, (c) the efficacy of science, (d) conservation biology, and (e) workings of state and federal agencies. The Committee includes two representatives of the original recovery team and two general science analysts whose job it is to keep tortoise scientists from becoming myopic while focusing on new data, analyses, and opinions for desert tortoise. The Committee also has a broad geographic representation within the range of the desert tortoise.

Roy Averill-Murray is the Amphibians and Reptiles Program Manager for the Arizona Game and Fish Department's Non-game Branch. Roy earned his B.S. in Wildlife and Fisheries Sciences from Texas A&M University in 1990. In 1993 he earned his M.S. in Wildlife and Fisheries Science from the University of Arizona, where he completed his thesis on estimating density and abundance of desert tortoises in the Sonoran Desert. Roy began working for the Arizona Game and Fish Department in 1995 as the Non-game Branch's Desert Tortoise Coordinator. As Desert Tortoise Coordinator, he directed the state's population monitoring program; conducted research on desert tortoise ecology, especially reproduction; and co-chaired the Arizona Interagency Desert Tortoise Team. He has published 8 peer-reviewed scientific papers on desert tortoises, including 3 chapters in the new book The Sonoran Desert Tortoise: Natural History, Biology, and Conservation. He assumed the duties of Amphibians and Reptiles Program Manager in 2002, and he is responsible for the management of all amphibians and reptiles in Arizona. Roy is also co-chair of Partners in Amphibian and Reptile Conservation's Southwest Regional Working Group.

Dr. David Delehanty is an assistant professor of biological sciences at Idaho State University. He received his Ph.D. from the Ecology, Evolution, and Conservation Biology Program at the University of Nevada, Reno in 1997. Dave has taught Conservation Biology at UNR and ISU, and he is well known for his innovative approach to this important subject. Dave has studied mechanisms underlying behavior, and the physiological importance of dietary carotenoid pigments on steroid-mediated physiological events involved with sexual maturation, sexual behavior, and reproductive performance in vertebrates. Importantly, Dave seeks to develop an improved understanding of animal behaviors integral to the success of conservation actions. He is implementing Nevada restoration programs for mountain quail (Oreortyx pictus) and Columbian sharp-tailed grouse (Tympanuchus phasianellus columbianus), two native species extirpated from all or part of their historic ranges. This includes developing new restoration techniques that account for behavioral and life history constraints. Dave is a critical thinker whose prowess in ecology, conservation biology, genetics, statistical analyses, research design, as well as species repatriation will make him an excellent member for the assessment team.

Attachment (continued)

Dr. Jill Heaton is an assistant professor in Environmental Studies at the University of

Redlands. She is Principal Investigator for the Redlands Institute (RI) Desert Tortoise Project (DTP). The RI and DTP are comprised of numerous research analysts, ecologists, GIS analysts, programmers, systems analysts, among other positions. Dr. Heaton and her DTP research team are building a desert tortoise decision support system. This system uses a scientific knowledge base linked to geospatial data within an application framework allowing users to evaluate decision and management options as well as identify knowledge and data gaps, thus clarifying research priorities. Dr. Heaton is an arid lands ecologist, with degrees in biology and geography. She earned her B.S. and M.S. in Biology from the University of North Texas, in 1993 and 1996, respectively. Dr. Heaton earned her Ph.D. in Physical Geography from Oregon State University in 2001. Her research career has been spent in the arid southwest working with mammals in the Chihuahuan Desert and reptiles in the Mojave. Dr. Heaton is experienced in applying quantitative and statistical techniques to ecological problems, and integrating ecological theory and principles with the spatial and temporal complexity of the natural environment. She has experience and expertise in habitat modeling, statistical modeling, environmental issues on military installations, urban and development biodiversity boundary interactions, and issues relating to land use and conservation. Dr. Heaton is trained in GIS applications, primarily the suite of ESRI GIS products, remote sensing and image analysis, and traditional statistical and geo-statistical analyses. Dr. Heaton has extensive fieldwork experience and strives to spend a quarter of her time in the field conducting research.

Dr. Jeff Lovich is Director of the U.S. Geological Survey, Western Ecological Research Center in Sacramento, California. The Center includes over 100 employees, located at 14 duty stations in California and Nevada. Jeff started his federal career in 1979 at the National Museum of Natural History/Smithsonian Institution in the Division of Amphibians and Reptiles while still an undergraduate student at George Mason University. After finishing his B.S. in Biology, he stayed on at George Mason, earning an M.S. in Biology. From there, he went to the University of Georgia, obtaining a Ph.D. in Ecology in 1990. Most of his tenure at the University of Georgia was spent at the Savannah River Ecology Laboratory in South Carolina. After a brief Post Doctoral fellowship at the Savannah River Ecology Laboratory, Jeff went to work for the Bureau of Land Management, first as a staff biologist at the California Desert District Office in Riverside, then as the Lead Wildlife Biologist in Palm Springs. As a charter member of the National Biological Survey (now Biological Resources Division of USGS) Jeff conducted research on desert tortoises and desert ecology in southern California. His research on turtles and tortoises spans almost 25 years. During that time he published over 60 scientific papers, most on the ecology and evolution of North American and Asian freshwater turtles. He discovered and formally described three of the world's 280 or so turtle species, including two in the United States and one in Japan. In addition he is co-author of the book "Turtles of the United States and Canada" published by the Smithsonian Institution Press in 1994, and co-editor of, and contributor to, the book "Biological Diversity: Problems and Challenges" published by the Pennsylvania Academy of Science the same year.

Dr. Earl McCoy is a professor of Biology at University of South Florida. Earl earned a B.S. in Biology at Florida State University in 1970, a M.S. in Biology at the University of Miami in 1973, and a Ph. D. in Biology at Florida State University in 1977. Earl has published over one hundred peer-reviewed publications, many of which focus on the ecology and conservation biology of gopher tortoises (Gopherus polyphemus). Earl has also

published extensively on the philosophy of science and the basis of experimental design in ecology, including the book Method in Ecology: Strategies for Conservation Problems. Earl is currently on the editorial board for three journals, including Ecology, and Ecological Monographs. He has been at the University of South Florida since 1977. He has been the associate Chairman for the department of Biology since 1992. Earl has also been a Visiting Assistant Professor at the University of Virginia on several occasions. Earl has mentored three post doctoral students, ten Ph.D. Students, and 27 masters students. He is currently the primary investigator or a collaborator on several research projects, including a large multi-disciplinary project examining the field epidemiology of the Upper Respiratory Tract Disease in the gopher tortoise.

Dr. David J. Morafka is the Lyle E. Gibson Emeritus Professor of Biology, CSU, Dominguez Hills, Carson, CA; a Research Associate in the Department of Herpetology, California Academy of Sciences, San Francisco. He earned his B.S. in Biology (with honors) at the University of California at Berkeley in 1967, and a Ph. D. at the University of Southern California in 1974. Dave was a member of the 1994 USFWS Desert Tortoise Recovery Team, and is member of the IUCN Fresh water Turtle and Tortoise Conservation Group. He has more than 50 publications and one book on North American desert reptiles and their conservation. David is currently the principal investigator on neonatology and hatchery nursery studies of the desert tortoise at Ft. Irwin and Edwards Air Force Base, and of the endangered Bolson tortoise in Mexico.

Ken Nussear is a Ph. D. Candidate in the Ecology, Evolution, and Conservation Biology Program at the University of Nevada, Reno, and he will finish his degree in 2003. He received his B.S. in Zoology (summa cum laude) from Colorado State University. He has published several peer-review publications on the physiology of desert reptiles. Ken has worked on many research projects involving desert tortoises since 1995. His research has focused on conservation biology, nutritional ecology, and physiological ecology of desert tortoises. These research projects included a multi-site, multi-state translocation project designed to examine the efficacy of translocation as a conservation tool for desert tortoises. The study looked within and beyond the geographic range of desert tortoises, and gives insights into the habitat requirements of this species. His work is being used to develop management strategies for desert tortoises in the face of the fastest growing human populations in the country. He has a pre-doctoral fellowship from the University of Redlands to continue his research. This research involves applied biophysical-ecology studies of tortoises to enhance our understanding of tortoise activity and how this impacts monitoring efforts. This work will help to refine desert tortoise monitoring efforts throughout the range of the listed population.

Attachment (continued)

Dr. C. Richard Tracy (Committee Chair) is a Professor of Biology and Director of the Biological Resources Research Center as well as being former Director of the Ecology, Evolution, and Conservation Biology Graduate Program at the University of Nevada, Reno. Additionally, he currently serves as the science advisor for the Clark County Desert Conservation Program in Nevada. He earned his B.A. and M.S. from California State University, Northridge and his Ph.D. from the University of Wisconsin. He has served on faculties at Colorado State University, the University of Wisconsin, the University of Washington, the University of Puerto Rico, Pepperdine University, the University of

Nebraska, and the University of Michigan. He has been honored as a Guggenheim Fellow, as a Distinguished Scholar at Pepperdine University, and as a Fellow of the Association of Western Universities. He also has received an American Society of Zoologists Service Award, a Desert Tortoise Council Conservation Award, a Service Award from the U.S. Fish and Wildlife Service, and he has served in leadership roles in the Ecological Society of America and the American Society of Zoologists. Dr. Tracy is an ecologist who has published more than 100 articles and book chapters on a wide range of topics in ecology, population biology, physiology, biophysics, and natural history of animals (mostly amphibians and reptiles), and whose studies have included research on herbivorous reptiles since 1977, and on desert tortoises since 1988. He was a member of the original desert tortoise recovery team, and he is a member of the Houston toad recovery team. He has served as major professor for 37 masters and Ph.D. students, and he has directed theses, dissertations, and postdoctoral research of several graduate students and postdoctoral scholars who have studied desert tortoise.